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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)			
Office Action Commons	10/660,651	FUKUDA, MASATO			
Office Action Summary	Examiner	Art Unit			
	Chad Dickerson	2625			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 12 Se	Responsive to communication(s) filed on 12 September 2003.				
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	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-10 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 12 September 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	are: a)⊠ accepted or b)⊡ objec drawing(s) be held in abeyance. Se≀ ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate Patent Application			

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DETAILED ACTION

Claim Objections

1. Claims 2, 7 and 10 are objected to because of the following informalities:

- Re claim 2: on line 16, the phrase "the server device" should be changed to -- a
 server device --.
 - On line 21, the phrase "said comparison means" should be changed to a comparison means --.
- Re claim 7: on line 27, the phrase "the WWW browser" should be changed to -- a
 WWW browser --.
 - o On page 25, line 1, the phrase "the description of an HTML file" should be changed to the phrase -- a description of an HTML file --.
- Re claim 10: on page 26, line 1, the phrase "the server device" should be changed to the phrase -- a server device --.
 - On page 26, line 5, the phrase "said comparison means" should be changed to -- a comparison means --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 2-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Re claim 2: The "function extension program" listed in claim 2 is non-statutory subject matter since this subject matter does not fit within the four categories of statutory subject matter (i.e. process, machine, manufacture, or composition of matter). A program alone is merely computer instructions capable of being executed by a computer and the computer program itself is not a process. It is suggested that the preamble of the claim be changed to reflect claim 8, conveying the point that a computer readable medium is needed to realize the computer program's functionality. Claims 3-9 are rejected because of their dependency on a rejected claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 6: the phrase "from said image memory" renders the claim indefinite. In the claim, it is dependent on claim 2, which does not have any reference to any image memory except for a first image list memory and a second image list memory. Does the "said image data memory" refer to the first or second image list memory or is this some other memory data? The above claim will be given the broadest reasonable interpretation.

Appropriate correction is required.

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 7. Claims 1-5, 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Holmstead '905 (US Pat No 2004/0021905).

Re claim 1: Holmstead '905 discloses a system and method for managing printable assets, comprising:

image data memory for storing image data transmitted to said printer (i.e. in Holmstead '905 the system can be configured to have a components of the system in a printer (100), or as a part of a host computer (206) in association with a printer (100). The host computer (206) is considered as the information processing apparatus, which has an image data memory (302). The local memory (302) has print job elements that can be transmitted to the printer (100) in association with the host computer (206). The elements (300) listed in figure 3 can be implemented in a host computer, which would

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provide the method to perform the above feature; see figs. 2 and 3; paragraphs [0032]-[0044]);

first image list memory for storing a list of identification information for the image data stored in said image data memory (i.e. the local memory (302) is also considered as the first image list memory since the print job elements, considered as a list of identification information for the image data stored in the local memory, is stored in the local memory. The print job elements are used to identify specific components of a document and these components identify the image data; see figs. 2 and 3; paragraphs [0032]-[0044]);

print instruction acquiring means for acquiring a print instruction indicating that the image data stored in said server device should be printed (i.e. the print job ticket (500) is considered as a print instruction. The control system (306) acquires the print job ticket (500) that may indicate image data that may be stored on a remote site, considered as a server and retrieves the data to print, based on the print instruction from the print job ticket (400). The remote site is shown in figure 5 to store print job elements that have certain components that are related to specific types of image data. The control system (306) recognizes the components that are only stored on these remote sites and prints the data after retrieval; see figs. 2, 3 and 5; paragraphs [0032]-[0044]);

second image list memory for storing a list of identification information for the image data to be printed that is included in said print instruction acquired from said print instruction acquiring means (i.e. on the remote site (202), a storage for the print job

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components, considered as identification information for the image data, is stored. This same information that is stored is also in the print instruction that is acquired by the control system (306). In the above example, the remote site (202) with the storage device is considered to be the second image list memory. Also, the input buffer stores the print job ticket (500) which has information relating to the print job components, which is considered to be the identification information for the image data. The input buffer can also be considered as the second image list memory. Therefore, the above feature is performed; see figs. 2, 3 and 5; paragraphs [0032]-[0044]);

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comparison means for comparing the list stored in said first image list memory and the list stored in said second image list memory (i.e. when the data is first received by the printer, or the host computer that is associated with the printer, the data is temporarily stored in the input buffer (304). The input buffer (304) holds the print job ticket (500) and compares the print job ticket (500) components, with the components stored in the local memory (302). This comparison is between the data stored in the input buffer (304) and the data stored in the local memory (302) to see if the data matches up to the print job ticket's (500) listed components; see figs. 2-5; paragraphs [0032]-[0044]); and

download means for downloading, from said server device, the image data that is included in the list stored in said second image list memory but not included in the list stored in said first image list memory, as a result of comparison by said comparison means (i.e. if the control system (306) detects that certain elements of the print job is missing in the local memory (302), then the control system (306) sends a request to

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download the components missing from the remote site (202) to the printer (100), or to the host computer (206) associated with the printer, and then the retrieved print job element is saved in the local memory for later processing if needed again. The control system (306) is considered as the downloading means since the control system (306) performs the function of downloading from the remote server (202), considered as the server; see figs. 2-5; paragraphs [0032]-[0044]).

Re claim 2: Holmstead '905 discloses a system and method for managing printable assets, said program causing a computer to execute:

a process of accepting a print instruction for a plurality of image data (i.e. the control system (306) accepts print instructions for a print job ticket (500) that includes one or more components linked to different aspects of a document, or a plurality of image data; see figs. 2-5; paragraphs [0032]-[0044]);

a process of acquiring a list of identification information for the image data transmitted to said printer from first image list memory storing said list (i.e. when the print job ticket (500) is received, the local memory (302) is accessed to see if certain elements of the print job ticket (500) are present in the local memory (302). If the certain elements are present, these elements, considered as a list of identification information for the image data, the elements are transmitted from the local memory (302) to the control system (306) to organize the print job elements and sent to the printer (100) once the print ready document is prepared; see figs. 2-5; paragraphs [0032]-[0044]);

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a process of managing to store a list of identification information for the image data to be printed that is included in said print instruction in second image list memory (i.e. on the remote site (202), a storage for the print job components, considered as identification information for the image data, is stored. This same information that is stored is also in the print instruction that is acquired by the control system (306). In the above example, the remote site (202) with the storage device is considered to be the second image list memory. Also, the input buffer stores the print job ticket (500) which has information relating to the print job components, which is considered to be the identification information for the image data. The input buffer can also be considered as the second image list memory and the data stored in the input buffer is included in a print job ticket that is giving an instruction for the included data to be printed. Therefore, the above feature is performed; see figs. 2, 3 and 5; paragraphs [0032]-[0044]);

a process of comparing the list stored in said first image list memory and the list stored in said second image list memory (i.e. when the data is first received by the printer, or the host computer that is associated with the printer, the data is temporarily stored in the input buffer (304). The input buffer (304) holds the print job ticket (500) and compares the print job ticket (500) components, with the components stored in the local memory (302). This comparison is between the data stored in the input buffer (304) and the data stored in the local memory (302) to see if the data matches up to the print job ticket's (500) listed components; see figs. 2-5; paragraph's [0032]-[0044]); and

a process of requesting the server device connected via a network for the image data that is included in the list stored in said second image list memory but not included

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in the list stored in said first image list memory, as a result of comparison by said comparison means (i.e. if the control system (306) detects that certain elements of the print job is missing in the local memory (302), then the control system (306) sends a request to download the components missing from the remote site (202) to the printer (100), or to the host computer (206) associated with the printer, and then the retrieved print job element is saved in the local memory for later processing if needed again. The control system (306) is considered as the downloading means since the control system (306) performs the function of downloading from the remote server (202), considered as the server; see figs. 2-5; paragraphs [0032]-[0044]).

Re claim 3: Holmstead '905 discloses the function extension program, further causing a computer to execute a process of managing to store the acquired image data by requesting the server device connected via the network in image data memory, and a process of updating the list stored in said first image list memory with the list stored in said second image list memory (i.e. the control system (306) causes a computer (206) to execute a process of managing the image data by storing the acquired image data in the local memory (302). The information in the local memory (302) is received from a remote site (202) when a control system (306) requests the information regarding the print job ticket (500) from the remote site (202); see figs. 2-5; paragraphs [0032]-[0044]), and a process of updating the list stored in said first image list memory with the list stored in said second image list memory (i.e. the local memory (302), considered as the

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first image list memory, may be updated by the image data stored on the remote sites (202); see figs. 2-5; paragraphs [0032]-[0044]).

Re claim 4: Holmstead '905 discloses the function extension program, further causing a computer to execute a process of acquiring the image data included in the list stored in said second image list memory from said image data memory, depending on a result of said comparison (i.e. in the system of *1, the control system (306) searches the local memory, considered as the first image list memory in the overall memory portion in the system, to see if the print job ticket (500) elements are found in the memory (302).

Before this process is performed, the input buffer (304) stores the overall print job ticket (500) information. While the control system (306) acquires image data that is included in the input buffer (304), which is considered as the second image list memory also apart of the overall memory in the system, the control system (306) acquires the image data information based, or depending on, the result of the comparison between the input buffer's (304) image data information and the information in the local memory (302); see figs. 2-5; paragraphs [0032]-[0044]).

Re claim 5: Holmstead '905 discloses the function extension program, further causing a computer to execute a process of transferring said acquired image data included in the list stored in said second image list memory to said software (i.e. the image data stored in the input buffer (304), which is considered as the second image list memory, is acquired and transferred to the control system (306) to obtain the needed print job

elements. The acquired information is transferred to the software that controls the printer (100) in the system in order to transfer the data to the printer (100). Also, the acquired information is transferred to the software in order to save the image data in the local memory (302) to update the system of the image data elements; see figs. 2-5; paragraphs [0032]-[0044]).

Re claim 7: Holmstead '905 discloses the function extension program, further causing a computer to execute a process of communicating with the WWW browser (i.e. in the system, when the remote sites (202) are requested, or communicated with, by the control system (306), an HTTP or other protocols can be used to execute this process of communication. Also, with the use of URLs in the system, this is also an example of using a WWW browser to communicate in the system; see figs. 2-5; paragraphs [0032]-[0044] and [0046]-[0056]), wherein said function extension program is executed based on the description of an HTML file acquired by the WWW browser (i.e. in the system of Holmstead '905, the communication of the control system (306) with the remote sites (202) is based on a description of an XML file, analogous to an HTML file, which is acquired through an HTTP process, or more specifically through the use of an URL utilizing the HTTP process. XML defines rules that a user can create their own exchange language and exchange documents of any kind, which also includes web pages which html is specifically limited to perform. The XML file used can perform the function of the HTML file and other functions of its own; see figs. 2-5; paragraphs [0032]-[0044]).

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Re claim 8: Holmstead '905 discloses a computer readable storage medium storing the function extension program according to claim 2 (i.e. with the system able to work with simply a printer, or a computer coupled to an associated printer. The control system (306) is stored on a computer readable medium, such as ROM (106) and is executed with computer executable instructions; see fig. 1; paragraphs [0032]-[0044]).

Re claim 9: Holmstead '905 discloses a system and method for managing printable assets comprising:

means for executing the function extension program according to claim 2 (i.e. this is considered as a dependent claim of claim 2. The system of Holmstead '905 has a control system (306) and other memory components that are able to execute the function extension program performed in claim 2; see figs. 1-5; paragraphs [0032][0044]); and

means for communicating with the server device or the printer as defined in claim 2 (i.e. with the control system (306) in the host computer having an associated printer, it is clear that a means to communicate with the printer is in the system of *1. Also, using the HTTP or other protocols, there is a means to communicate with the remote sites (202), considered as server devices, in the system; see figs. 1-5; paragraphs [0032]-[0044]).

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Re claim 10: Holmstead '905 discloses a system and method for managing printable assets, comprising:

a step of accepting a print instruction for a plurality of image data (i.e. the control system (306) accepts print instructions for a print job ticket (500) that includes one or more components linked to different aspects of a document, or a plurality of image data; see figs. 2-5; paragraphs [0032]-[0044]);

a step of acquiring a list of identification information for the image data transmitted to said printer from first image list memory storing said list (i.e. when the print job ticket (500) is received, the local memory (302) is accessed to see if certain elements of the print job ticket (500) are present in the local memory (302). If the certain elements are present, these elements, considered as a list of identification information for the image data, the elements are transmitted from the local memory (302) to the control system (306) to organize the print job elements and sent to the printer (100) once the print ready document is prepared; see figs. 2-5; paragraphs [0032]-[0044]);

a step of managing to store a list of identification information for the image data to be printed that is included in said print instruction in second image list memory (i.e. on the remote site (202), a storage for the print job components, considered as identification information for the image data, is stored. This same information that is stored is also in the print instruction that is acquired by the control system (306). In the above example, the remote site (202) with the storage device is considered to be the second image list memory. Also, the input buffer stores the print job ticket (500) which

has information relating to the print job components, which is considered to be the identification information for the image data. The input buffer can also be considered as the second image list memory and the data stored in the input buffer is included in a print job ticket that is giving an instruction for the included data to be printed. Therefore, the above feature is performed; see figs. 2, 3 and 5; paragraphs [0032]-[0044]);

a step of comparing the list stored in said first image list memory and the list stored in said second image list memory (i.e. when the data is first received by the printer, or the host computer that is associated with the printer, the data is temporarily stored in the input buffer (304). The input buffer (304) holds the print job ticket (500) and compares the print job ticket (500) components, with the components stored in the local memory (302). This comparison is between the data stored in the input buffer (304) and the data stored in the local memory (302) to see if the data matches up to the print job ticket's (500) listed components; see figs. 2-5; paragraphs [0032]-[0044]); and

a step of requesting the server device connected via a network for the image data that is included in the list stored in said second image list memory but not included in the list stored in said first image list memory, as a result of comparison by said comparison means (i.e. if the control system (306) detects that certain elements of the print job is missing in the local memory (302), then the control system (306) sends a request to download the components missing from the remote site (202) to the printer (100), or to the host computer (206) associated with the printer, and then the retrieved print job element is saved in the local memory for later processing if needed again. The control system (306) is considered as the downloading means since the control system

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(306) performs the function of downloading from the remote server (202), considered as the server; see figs. 2-5; paragraphs [0032]-[0044]).

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmstead '905 in view of Suzuki '013 (US Pat No 5923013).

Re claim 6: The teachings of Holmstead '905 are disclosed above.

Holmstead '905 discloses the function extension program, further causing a computer to execute a process of managing the image data corresponding to the identification information that is included in the list stored in said first image list memory but not included in the list stored in said second image list memory, depending on a result of said comparison (i.e. in the system, the image data, or elements that are considered to be the identification information, corresponding to the print job ticket (500) is managed by the system in the local memory (302) or temporarily in the input buffer (304). The image data information can be present in the input buffer (304), which is considered as the second image memory, and can be absent in the local memory (302), which is considered as the first image memory. Depending on the comparison between the two

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memories, image data can be managed by the first image memory if found that the local

memory (302) does not have the current image data present in the local memory (302);

see figs. 2-5; paragraphs [0032]-[0044]).

However, Holmstead '905 fails to teach causing a computer to execute a process

of managing to delete, from said image data memory.

However, this is well known in the art as evidenced by Suzuki '013. Suzuki '013

discloses causing a computer to execute a process of managing to delete, from said

image data memory (i.e. in Suzuki '013, when a operation instructing to delete a job

description file (JDF) is entered, the system checks to see if any content of page data or

another description file references the current page data instructed to be deleted. Once

the system concludes that the page data is not referenced by a job description file, the

page data is deleted and the contents management table is updated; see figs. 12, 33-

35; col. 17, lines 1-68, col. 18, lines 1-67 and col. 19, lines 1-25)

Therefore, in view of Suzuki '013, it would have been obvious to one of ordinary

skill at the time the invention was made to have a computer to execute a process of

managing to delete, from an image data memory in order to provide the function of

deleting job data that is not attainable in a conventional print control system (as stated

in Suzuki '013 col. 2, lines 19-33).

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Conclusion

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 11. Ichihara '575 (US Pat No 7023575) discloses a system where a printer is connected to a server computer. There is a first and second memory section in the system where when the second memory section does not have a certain image data to print out, the image data is obtained from the first image memory. The second image memory section is contained in the printer in order to reduce bandwidth on a communications connection. The second memory caches the printed image in order to prevent resending the print data to the second memory and reduce bandwidth on the communications connection in the system.
- 12. Fiske '587 (US Pat No 7042587) discloses a method of caching data that prevents resending data that has already been previously printed and stored. The system compares memories and determines if a sent print job has corresponding rasterized print jobs in the memory before resending a rasterized print job to be RIPed in the system. If corresponding data is found, the data is used, but if data is not found, the current job is RIPed before processed for printing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)- 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CD/ Chad Dickerson July 2, 2007

AUNG S. MOE SUPERYISORY PATENT EXAMINER